Patent 54/254; OI7011402001



Docket No. 254/254; OI7011402001 OID-2000-031-01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Alok K. SRIIVASTAVA et al.

Serial No.: 09/872,647

Filed: May 31, 2001

For:

Sir:

METHOD AND MECHANISM FOR

DIAGNOSING COMPUTER

APPLICATIONS USING TRACES

Group Art Unit: 2124

Examiner: Satish Rampuria

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

02/28/2005 SSESHE1 00000025 502518 09872647

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In accordance with 37 CFR §§ 1.97 and 1.98, the items identified in this Supplemental Information Disclosure Statement ("IDS") are brought to the attention of the Office. The items are listed on the attached form PTO/SB/08b.

The items identified in this IDS may or may not be "material" pursuant to 37 CFR § 1.56. The submission thereof by Applicants is not to be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as "prior art" under 35 USC § 102 with respect to this invention unless specifically designated by Applicants as such.

1. Timing of the Information Disclosure Statement:

However, if the undersigned is in error in this regard, Applicant respectfully requests that
the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and charge the
fee due under 37 CFR §1.17(p) to the deposit account referenced below.

		However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and a statement under 37 CFR § 1.97(e) is included below, thus no fee is required.
\boxtimes	This II	OS is being submitted under 37 CFR § 1.97(c), that is after mailing of a first Office Action on
	rits, but	before a Final Action under 37 CFR § 1.113 or a Notice of Allowance under 37 CFR
§ 1.31	1.	
	\boxtimes	The fee due under 37 CFR § 1.17(p) is submitted herewith.
		The fee due under 37 CFR § 1.17(p) is being concurrently submitted with the filing of an electronic IDS submission. Thus, no additional fee is required.
		A statement under 37 CFR § 1.97(e) is included below, thus no fee is required. In the event that this IDS is not received before a Final Action or a Notice of Allowance, then Applicant respectfully requests that the Office consider the filing of these papers to be submitted under 37 CFR § 1.97(d) and charge the fee due under 37 CFR § 1.17(p) to the deposit account below.
	This II	OS is being submitted under 37 CFR § 1.97(d), that is after a Final Action under 37 CFR
§ 1.11	3 or a No	otice of Allowance under 37 CFR § 1.311, but before payment of the issue fee. A statement
under :	37 CFR	§ 1.97(e) is included below. The fee due under 37 CFR § 1.17(p) is submitted herewith.
	This II	OS is being submitted under 37 CFR § 1.97(i), that is after a Final Action under 37 CFR
§ 1.11	3 or a No	otice of Allowance under 37 CFR § 1.311, but before payment of the issue fee.
		STATEMENT UNDER 37 CFR § 1.97(e):
	Some i	tems contained in this IDS were cited in a communication from a foreign patent office in a
counte	rpart for	eign application not more than three months prior to the filing of this IDS.
	No iter	n contained in this IDS was cited in a communication from a foreign patent office in a
counte	rpart for	eign application, and, to the knowledge of the person signing this statement after making
reason	able inqu	airy, no item of information contained in this IDS was known to any individual designated in
37 CF	R § 1.56	(c) more than three months prior to the filing of this IDS.
2. Co ₁	pies of tl	he Cited Items:
\boxtimes	Copies	of all of the items listed on the attached form PTO/SB/08b are enclosed.
	Copies	of only the following items listed on the attached forms PTO/SB/08a and PTO/SB/08b are
	enclose	ed.
	Copies	of the following documents listed in PTO/SB/08a and copies of the following documents
	listed i	n PTO/SB/08b were previously cited by the Office or submitted in Information Disclosure

Statements in related applications: and accordingly, copies are not included herewith. See 37 C.F.R. § 1.98(d). The Examiner is requested to make these documents of record.

3. Concise Explanation of Relevance:

\boxtimes	A concise explanation of relevance of the items listed on form PTO/SB/08b is not given.
	A concise explanation of relevance of some of the items listed on forms PTO/SB/08a and
	PTO/SB/08b is in the form of an English language copy of a Search Report from a foreign patent
	office, issued in a counterpart application, which refers to the relevant portions of the references
	(copy attached).

4. Related Applications:

Applicant(s) bring to the Office's attention the following related application(s):

U.S. Patent Application Serial Nos. 09/872,590 filed on May 31, 2001, and 10/208,120, 10/208,129 and 10/209,612 all filed July 29, 2002.

5. Conclusion:

Citation of the above documents shall not be construed as:

- 1. an admission that the documents are necessarily prior art with respect to the instant invention;
- 2. a representation that a search has been made, other than as described above; and
- 3. an admission that the information cited herein is, or is considered to be, material to patentability as defined in § 1.56(b).

It is respectfully requested that the Examiner indicate consideration of the cited references by returning a copy of the attached forms PTO/SB/08a and PTO/SB/08b with initials or other appropriate marks. In the unlikely event that the transmittal letter is separated from this document and the U.S. Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 50-2518**

Patent Docket No. 254/254; OI7011402001 OID-2000-031-01

referencing 7011402001. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

Dated:

By::

Peter C. Mei

Registration No. 39,768

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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ANTA HADENA Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

Complete if Known					
Application Number	09/872,647				
Filing Date	May 31, 2001				
First Named Inventor	Alok SRIVASTAVA				
Art Unit	2124				
Examiner Name	Satish Rampuria				
Attorney Docket Number	254/254; OI7011402001				

		NON PATENT LITERATURE DOCUMENTS	
Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal,	T
Initials*	No.1	serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	l
	1	BISWAS, P. et al. "Trace Driven Analysis of Write Caching Policies for Disks" Proceedings of the 1993 ACM SIGMETRICS Conference on Measurement and Modeling of Computer Systems (1993) pp. 13-23	
-	2	BORG, A. et al. "Generation and Analysis of Very Long Address Traces" <i>Proceedings of the 17th Annual International Symposium on Computer Architecture</i> (May 1990) 18 (3):270-279	
	3	CHANG, P. P. and WM. W. HWU "Trace Selection for Compiling Large C Application Programs to Microcode" Proceedings of the 21 st Annual Workshop on Microprogramming and Microarchitecture (Jan. 1988) pp. 21-29	
	· 4	COLBY, C. and P. LEE "Trace-Based Program Analysis" Proceedings of the 23" ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages" (Jan. 1996) pp. 195-207	
	5	DAN, A. et al. "Characterization of Database Access Pattern for Analytic Prediction of Buffer Hit Probability" VLBD Journal (1995) 4:127-154	
	6	DUCASSÉ, M. "Coca: An automated Debugger for C" Proceedings of the 21 st International Conference on Software Engineering (May 1999) pp. 504-513	
	7	EZUST, S.A. and G. v. BOCHMANN "An Automatic Trace Analysis Tool Generator for Estelle Specifications" Proceedings of the Conference on Applications, Technologies, Architectures and Protocols for Computer Communication (Oct. 1995) 25(4):175-184	
	8	GOLDSZMIDT, G. S. and S. YEMINI "High-Level Language Debugging for Concurrent Programs" ACM Transactions on Computer Systems (TOCS) (Nov. 1990) 8(4):311-336	
	9	HSU, W. W. et al. "I/O Reference Behavior of Production Database Workloads and the TPC Benchmarks - An Analysis at the Logical Level" ACM Transactions on Database Systems (TODS) (Mar. 2001) 26(1):96-143	
	10	LeDOUX, C. H. and D. S. PARKER, Jr. "Saving Traces for ADA Debugging" Proceedings of the 1985 Annual ACM SIGAda International Conference on Ada (May 1985) V(2):97-108	
	11	LENCEVICIUS, R. et al. "Third Eye - Specification-Based Analysis of Software Execution Traces" <i>Proceedings of the 22nd International Conference on Software Engineering</i> (June 2000) p. 772	
	12	LO, J. L. et al. "An Analysis of Database Workload Performance on Simultaneous Multithreaded Processors" Proceedings of the 25 th Annual International Symposium on Computer Architecture (Apr. 1998) 26 (3):39-50	
	13	MILLER, B.P. and JD. CHOI "A Mechanism for Efficient Debugging of Parallel Programs" Proceedings of the ACM SIGPLAN 1998 Conference on Programming Language Design and Implementation (June 1988) pp. 135-144	
	14	PUTRYCZ, E. "Using Trace Analysis for Improving Performance in COTS Systems" Proceedings of the 2004 Conference of the Centre for Advanced Studies on Collaborative Research (Oct. 2004) pp. 1-13	
	15	RAHM. E. "Empirical Performance Evaluation of Concurrency and Coherency Control Protocols for Database Sharing Systems" ACM Transactions on Database Systems (TODS) (June 1993) 18(2):333-377	
	16	RAMAKRISHNAN, K. K. "Analysis of File I/O Traces in Commercial Computing Environments" Proceedings of the 1992 ACM SIGMETRICS Joint International Conference on Measurement and Modeling of Computer Systems (June 1992) 20(1):78-90	
	17	REISS, S.P. and M. RENIERIS "Generating Java Trace Data" Proceedings of the ACM 2000 Conference on Java Grande (June 2000) pp. 71-77	
-	18	SINGHAL, V. and A.J. SMITH "Analysis of locking behavior in three real database systems" The VLDB Journal (1997) 6:40-52	

1

Examiner Signature	 Date Considered	
Signature	Considered	

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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			1	Complete if Known			
PARADEME	FEE TO A N		Application Number	09/872,647			
TRADE	FEE TRAN	SMITTAL	Filing Date	May 31, 2001			
	for FY	2005	First Named Inventor	Alok K. SRIVASTAVA			
	☐ Applicant claims small entity	status. See 37 CFR 1.27	Examiner Name	Satish Rampuria			
			Art Unit	2124			
,	TOTAL AMOUNT OF PAYMENT	(\$) 180	Attorney Docket No.	254/254; OI7011402001			
	METHOD OF PAYMENT (che	k all that apply)					
	☐ Check ☐ Credit Card ☐	Money Order None	Other (please identif	y):			
	Deposit Account Deposit Ac	count Number: 502518	Deposit Acc	ount Name: Bingham McCutchen LLP			
	For the above-identified	deposit account, the Director i	s hereby authorized to:	(check all that apply)			
	Charge fee(s) ind	cated below	☐ Cha	rge fee(s) indicated below, except for the fili	ng fee		
Charge any additional fee(s) or underpayments of fee(s) Credit any overpayments Under 37 CFR 1.16 and 1.17 WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.							
	FEE CALCULATION						
	1. BASIC FILING, SEARCH, FILII		S EARCH FEES Small Enti	EXAMINATION FEES by Small Entity			
	Application Type Utility 300	\$) <u>Fee(\$)</u> <u>F</u>	ee(\$) Fee(\$) 00 250	Fee(\$) Fee(\$) Fees Pa	<u>iid (\$)</u>		

Plant 200 100 300 150 160 80 300 150 500 250 600 300 Reissue 200 100 0 Provisional 0 0 2. EXCESS CLAIM FEES **Small Entity Fee Description** Fee (\$) Fee (\$) 25 Each claim over 20 (including Reissues) 50 200 100 Each independent claim over 30 (including Reissues) Multiple dependent claims 360 180 **Total Claims Multiple Dependent Claims Extra Claims** Fee(\$) Fee Paid (\$) -20 or HP= Fee (\$) Fee Paid (\$)

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Date

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HP = highest number of total claims paid for, if greater than 20. **Extra Claims** Indep. Claims Fee(\$) Fee Paid (\$) - 3 or HP= Х

HP = highest number of independent claims paid for, if greater than 3.

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3. /	AΡ	PL	ICA	TIO	N S	IZE	FEE

Name (Print/Type)

Design

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$) Fee Paid (\$) - 100 = / 50 = (round up to a whole number) x 4. OTHER FEE(S) Fees Paid (\$)

Non-English Specification, \$130 fee (no small entity discount)

Peter C. Mei

Other (e.g., late filing surcharge): Submission of Information Disclosure Statement

SUBMITTED BY Registration No. Signature 39,768 Telephone 650-849-4400 (Attorney/Agent)

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

09/872,647

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Application Number

IRANSIVIIIIA	Filing Date		May 31, 2001		
FORM	First Named Inven	tor	Alok K. SR	RIVASTAVA	
	Art Unit		2124		
(to be used for all correspondence after	Examiner Name		Satish Rampuria		
Total Number of Pages in This Submiss		Attorney Docket N	umber	254/254; C	01701142001
	ENCLO	SURES (check all tha	t apply)		
Fee Transmittal Form	☐ Drawing(s	;)		After Allo	owance Communication to TC
Fee Attached	Licensing	-related Papers			Communication to Board als and Interferences
Amendment / Reply	Petition				Communication to TC Notice, Brief, Reply Brief)
After Final		Convert to a al Application		Proprieta	ary Information
Affidavits/declaration(s)		Attorney, Revocation of Correspondence Add	ress	Status L	etter
Extension of Time Request	Terminal	Disclaimer			nclosure(s) lentify below):
Express Abandonment Request		for Refund			B/08b (1 page); es; postcard receipt
☐ Information Disclosure Statement		ber of CD(s) ndscape Table on CD			
Certified Copy of Priority	Remarks		I		
Document(s)					
Reply to Missing Parts/ Incomplete Application					
Reply to Missing Parts under 37 CFR1.52 or 1.53					
SIG	NATURE OF	APPLICANT, ATTO	RNEY, OI	RAGENT	
Firm	Bingham McCu	tchen LLP			
Signature					
Printed Name Peter C. N					
Date February 23		Reg. No. 39,768			
CERTIFICATE OF TRANSMISSION/MAILING					
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 2313-1450 on the date shown below.				with the United States Postal ent, Commissioner for Patents,	
Signature					
Typed or printed name Mary R.			Date	February 23, 2005	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.